

CLAIM AMENDMENTS

Claim 1 (Currently Amended)

A radiation image converting panel comprising a support having thereon a stimuable phosphor layer containing a polymer and a stimuable phosphor produced by ~~sublimation of a CsBr:Eu precursor~~ the method of claim 7, the stimuable phosphor layer having a thickness of 50 μm to 1 mm,

wherein the stimuable phosphor has a spherical shape.

Claim 2 (Original)

The radiation image converting panel of claim 1,

wherein the stimuable phosphor has an average particle diameter of 0.1 to 5 μm .

Claim 3 (Original)

The radiation image converting panel of claim 1,

wherein the stimuable phosphor layer comprises Cs atom in an amount of not less than 10% based on the total weight of the layer.

Claim 4 (Original)

The radiation image converting panel of claim 1, wherein the stimuable phosphor layer comprises:

(i) CsBr; and

(ii) Eu and an impurity,

an amount of Eu and the impurity being 100 to 1000 ppm by weight based on the total weight of CsBr.

Claim 5 (Original)

The radiation image converting panel of claim 1, wherein the stimuable phosphor is represented by Formula (1):

Formula (1)



wherein M^1 is at least one alkaline metal atom selected from the group consisting of Li, Na, K, Rb, and ~~Cs~~, Cs; M^2 is at least one divalent metal atom selected from the group consisting of Be, Mg, Ca, Sr, Ba, Zn, Cd, Cu, and Ni; M^3 is at least one trivalent metal atom selected from the group consisting of Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Al, Ga and In; X, X', and X'' each represents at least one halogen atom selected from the group consisting of F, Cl, Br, and I; A represents at least one metal atom selected from the group consisting of Eu, Tb, In, Ce, Tm, Dy, Pr, Ho, Nd, Yb, Er, Gd, Lu, Sm, Y, Tl, Na, Ag, Cu, and Mg; and a, b, and e each are

numbers satisfying the conditions of $0 \leq a < 0.5$, $0 \leq b < 0.5$,
and $0 < e \leq 0.2$.

Claim 6 (Original)

The radiation image converting panel of claim 1,
wherein the stimuable phosphor has a peak at (2,0,2) as a
maximum peak measured with X-ray diffraction.

Claim 7 (Currently Amended)

A method for producing ~~the~~ a stimuable phosphor ~~of claim~~
~~1~~, comprising the steps of:

(i) forming a CsBr:Eu precursor with an emulsified layer
method by mixing:

(a) an aqueous solution containing Cs ions, Br ions and Eu
ions;

(b) an organic solvent having a different solubility for
the Cs ions, the Br ions and the Eu ions; and

(c) a surface active agent;

(ii) isolating the CsBr:Eu precursor, and

~~(iii)~~ (iii) burning the CsBr:Eu precursor to obtain the
stimuable phosphor.

Claim 8 (Currently Amended)

A method for producing ~~the~~ a stimuable phosphor ~~of claim~~
±, comprising the steps of:

(i) forming an aqueous phase containing Cs ions, Br ions
and Eu ions;

(ii) adding an organic phase containing an organic solvent
and an surface active agent to the aqueous phase so as to obtain
a CsBr:Eu precursor;

(iii) isolating the CsBr:Eu precursor, and

(iv) burning the CsBr:Eu precursor to obtain the stimuable
phosphor.

Claim 9 (Currently Amended)

A The method for producing the stimuable phosphor of ~~claim~~
± claim 7, comprising a step of:

heating the stimuable phosphor between 400 to 700 °C under
an atmospheric pressure.

Claim 10 (Currently Amended)

A method for producing ~~the~~ a radiation image converting panel ~~of claim 1~~, comprising the steps of:

(i) mixing ~~a~~ the stimuable phosphor produced by the method of claim 7 and a polymer to obtain a coating mixture;

(ii) coating the coating mixture on a support to obtain a coated layer; and

(iii) heating the coated layer under an inactive gas atmosphere so as to dry the coated layer.

Claim 11 (New)

A radiation image converting panel comprising a support having thereon a stimuable phosphor layer containing a polymer and a stimuable phosphor produced by the method of claim 8, the stimuable phosphor layer having a thickness of 50 μm to 1 mm,

wherein the stimuable phosphor has a spherical shape.

Claim 12 (New)

The radiation image converting panel of claim 11,

wherein the stimuable phosphor has an average particle diameter of 0.1 to 5 μm .

Claim 13 (New)

The radiation image converting panel of claim 11,
wherein the stimuable phosphor layer comprises Cs atom in
an amount of not less than 10% based on the total weight of the
layer.

Claim 14 (New)

The radiation image converting panel of claim 11, wherein
the stimuable phosphor layer comprises:

(i) CsBr; and

(ii) Eu and an impurity,

an amount of Eu and the impurity being 100 to 1000 ppm by
weight based on the total weight of CsBr.

Claim 15 (New)

The radiation image converting panel of claim 11, wherein
the stimuable phosphor is represented by Formula (1):

Formula (1)



wherein M^1 is at least one alkaline metal atom selected from
the group consisting of Li, Na, K, Rb, and Cs; M^2 is at least one
divalent metal atom selected from the group consisting of Be,
Mg, Ca, Sr, Ba, Zn, Cd, Cu, and Ni; M^3 is at least one trivalent
metal atom selected from the group consisting of Sc, Y, La, Ce,

Pr, Nd, Pm, Sm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Al, Ga and In; X, X', and X'' each represents at least one halogen atom selected from the group consisting of F, Cl, Br, and I; A represents at least one metal atom selected from the group consisting of Eu, Tb, In, Ce, Tm, Dy, Pr, Ho, Nd, Yb, Er, Gd, Lu, Sm, Y, Tl, Na, Ag, Cu, and Mg; and a, b, and e each are numbers satisfying the conditions of $0 \leq a < 0.5$, $0 \leq b < 0.5$, and $0 < e \leq 0.2$.

Claim 16 (New)

The radiation image converting panel of claim 11, wherein the stimuable phosphor has a peak at (2,0,2) as a maximum peak measured with X-ray diffraction.

Claim 17 (New)

The method for producing the stimuable phosphor of claim 8, comprising a step of:

heating the stimuable phosphor between 400 to 700 °C under an atmospheric pressure.

Claim 18 (New)

A method for producing a radiation image converting panel, comprising the steps of:

(i) mixing the stimuable phosphor produced by the method of claim 8 and a polymer to obtain a coating mixture;

(ii) coating the coating mixture on a support to obtain a coated layer; and

(iii) heating the coated layer under an inactive gas atmosphere so as to dry the coated layer.